

# SMARt1



**AC Charger and Installer Manual** 

# **Contents**

| Ab | out <sup>-</sup> | This Manual  | 3  |
|----|------------------|--|----|
|    |                  | Il Symbols and Signal Words  the Document          | 3  |
| 1. | Safe             | ty and Warnings                                    | 4  |
| 2. | Acce             | ssories  | 6  |
| 3. | Prod             | uct Overview                                       | 7  |
|    | 3.1              | Product dimensions                                 | 8  |
|    | 3.2              | Specifications                                     | 9  |
| In | stall            | ation Guide  |    |
| 4. | Insta            | llation  | 11 |
|    | 4.1              | Prepare tools                                      | 11 |
|    | 4.2              | Ethernet connection cable                          | 12 |
|    | 4.3              | Prepare RCBO                                       | 12 |
|    | 4.3              | Prepare AC input cable                             | 12 |
|    |                  | Wiring   | 13 |
|    |                  | Mounting plate installation                        | 16 |
| Cł | narg             | er Configuration (Installer)                       |    |
| 5. | Insta            | llation Tests and Configurations                   | 19 |
|    | 5.1              | Charger Access Point (AP) page configuration       | 19 |
|    | 5.2              | RCD test setup (recommended step)                  | 22 |
| 6. | Cha              | rger Configuration and Monta App Setup             | 25 |
|    | 6.1              | Network configuration                              | 25 |
|    | 6.2              | Load balance configuration (optional)              | 28 |
|    | 6.3              | Maximum charging current setting (optional)        | 29 |
|    | 6.4              | Instructions to toggle from 22kW to 7kW (optional) | 30 |

## **Charger Configuration (Installer)**

| 7. Mon  | 7. Monta Set-up and User Guide 3      |    |  |
|---------|---------------------------------------|----|--|
| 8. Abo  | ut PEN Protection                     | 35 |  |
| 9. UK I | EV Smart Charge Point Regulation      | 35 |  |
| 9.1     | Randomised delay                      | 36 |  |
| 9.2     | Loss of communications network access | 36 |  |
| 9.3     | Default charge schedule               | 37 |  |
| 9.4     | Cyber security                        | 38 |  |
| Light   | Indicators and Troubleshooting        |    |  |
| 10. Lig | ht Indicators                         | 40 |  |
| 11. Tro | publeshooting                         | 41 |  |
| 12. Ma  | intenance                             | 42 |  |
| 13. Se  | curity Events and Customer Support    | 42 |  |
| 13.     | 1 Security events                     | 42 |  |
| 13.2    | 2 Monta support                       | 43 |  |
| 13.3    | 3 Evtec customer support              | 43 |  |

#### **About This Manual**

Thank you for choosing our Smart 1 Series charger.

This manual will guide you through the steps required to install, use, and maintain Smart 1 Series charger.

The manual is for reference only and does not constitute a warranty of any kind. The actual product (including but not limited to color, size, and functions) may vary. If this manual is inconsistent with the description on the official website, the latter prevails.

Some functions may be subject to change, according to the charger's latest software and app updates.

# General Symbols and Signal Words Used in the Document



#### With signal word 'Danger':

If you do not obey the instruction, this can cause injury or death.



#### With signal word 'Warning':

If you do not obey the instruction, this can cause injury.



#### With signal word 'Caution':

If you do not obey the instruction, this can cause damage to the EVSE or to property.



#### With signal word 'Note':

A note gives more data or give some tips, to make it easier to do the steps.

# **Safety and Warnings**



- 1. Do not install or use the product in or near areas with flammable, explosive, chemical materials, or steam.
- Before installing or cleaning the product, switch off the upstream residual current operated circuit-breakers with integral over current protection (RCBO) of it.
- 3. Do not use or replace the product in extreme weather conditions.
- 4. Do not remove the safety marks, warning signs, nameplates, or cabling marks from the product.
- 5. Do not spray water or any liquids on the product.
- 6. Keep children and pets away from the product.
- 7. Do not disassemble, repair, or modify the product on your own; instead, by a certified or qualified professional.
- 8. When installing the product, install the ground cable first. When uninstalling the product, remove the ground cable last. Do not work on the product in the absence of a properly installed ground cable.
- Do not install or remove power cables with power on. Before switching on the upstream RCBO, ensure that cables are correctly connected to the charger.
- 10. After the upstream RCBO is switched on, do not touch the terminals directly or with conductors.
- 11. Use cables that comply with local regulations and ensure that the insulation layer is intact.
- Keep cables at least 30 mm away from heat-generating components or heat source areas.
- 13. Do not fold or crush any component of the product, or damage it with sharp objects.
- Do not use the product if it is defective, cracked, damaged, or malfunctioned.
- 15. A generator cannot serve as the power supply for the product.
- 16. Do not connect the product to devices other than a vehicle.
- 17. Cord extension sets are not allowed to be used.
- 18. Do not insert your fingers or sharp objects into an components of the product.



- 1. Ensure that the installation surface is solid enough to hold the charger. It is recommended that the wall have a bearing capacity of at least 100 kg.
- 2. Ensure that the wall is flat and reserve sufficient space around the installation position to ensure good ventilation.
- 3. Ensure that the wall is larger than the rear cover of the charger.
- 4. When installing the product, use a screwdriver with a proper torque to tighten the screws.
- 5. When routing power cables, ensure that there is no coiling or twisting.
- 6. Do not join or weld power cables. If necessary, use a longer cable.



- 1. Do not use third-party cables or adapters.
- 2. Do not drop, squeeze, or pierce the product to avoid device faults.
- 3. Before charging your electric or hybrid vehicle, turn off the car.
- 4. Radio waves generated by the product may affect normal operation of implanted medical appliances or personal medical appliances, such as the pacemakers, cochlear implants, and hearing aids. Consult the manufacturer of your medical equipment for more information.
- 5. Do not install or use the product in an environment with strong magnetic fields or near a wireless transmitter.



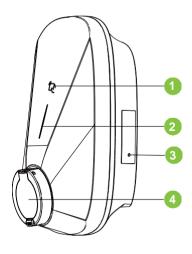
# **Accessories**

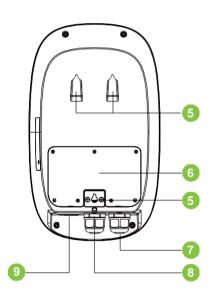
Upon receiving the product, please verify that all accessories are included. If anything is missing, kindly contact us.

| ITEM                                      | ICON                                    | QUANTITY | FUNCTION  |
|---|---|----------|---|
| Wire ferrules                             |   | 5        | To connect the AC power wire                                    |
| Mounting template                         | 0 0                                     | 1        | To position on the wall to drill holes                          |
| RFID card                                 | (C) | 2        | Swipe card to start charging                                    |
| Wall plug &<br>Screw                      | S. T. A.                                | 6*/7*    | To fasten the charger and cable holder                          |
| Mounting<br>bracket                       |   | 1*       | To secure the charger (socket version) on to the wall/ pedestal |
| L shaped wrench                           |   | 1        | To fasten the screw at the bottom of the charger                |
| Certificate of comformity & Warranty card |   | 1        | Warranty terms and conditions                                   |

Power supply cable:
Single-phase- 3 core Maximum Cross-Sectional Area: 6mm²
Three phase- 5 core SWA Maximum Cross-Sectional Area: 6mm²

# **Product Overview**

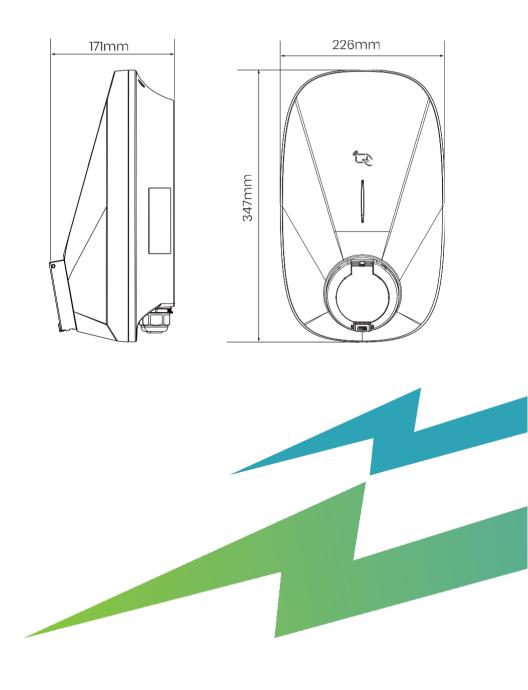




- 1. RFID card sensor
- 2. LED indicator
- 3. Reset bottom
- 4. Charging socket
- 5. Mounting holes

- 6. Wiring area
- 7. AC input cable inlet
- 8. Network cable inlet
- 9\*. Charging cable inlet/Reserved (socket version)

#### 3.1 Product dimensions



#### 3.2 Specifications

| PRODUCT MOI            | DEL                                       | SMART 1  |   |  |
|------------------------|---|--|---|--|
|                        | Power Supply                              | 1P+N+PE  | 3P+N+PE   |  |
|                        | Rated Voltage                             | 230V AC  | 400V AC   |  |
| Electric specification | Rated Current                             | 32A  |   |  |
|                        | Frequency                                 | 50/60Hz  |   |  |
|                        | Rated power                               | 7kW 22kW   |   |  |
|                        | Charging mode                             | Mode 3   |   |  |
|                        | Charge Connector                          | Type 2 socket  |   |  |
| Classic                | Enclosure                                 | PC   |   |  |
| attributes             | Installation                              | Wall-mounted/Pole-mounted (optional)   |   |  |
|                        | LED Indicator                             | Green &Yel   | low & Red   |  |
|                        | Wifi/Ethernet/<br>Bluetooth               | Supp   | port  |  |
| Communication          | 4G  | Optional   |   |  |
|                        | OCPP                                      | OCPP 1.6 Json  |   |  |
|                        | Applicable scenario                       | Indoor / outdoor   |   |  |
|                        | Working temperature                       | -30°C to 50°C  |   |  |
|                        | Working humidity                          | 5% to 95%  |   |  |
|                        | Pollution degree                          | PD 2 (internal) PD3 (external)   |   |  |
| Working                | RCD                                       | 30mA AC + 6mA DC   |   |  |
| environment            | Ingress protection                        | IP54   | IP54  |  |
|                        | Impact protection                         | IK10   |   |  |
|                        | Electrical protection                     | Pen-fault protection, Over current protection, Residual current protection, Surge protection, Over/Under voltage protection, Over/Under frequency protection, Over temperature protection    |   |  |
|                        | Grounding                                 | TN,  | П   |  |
|                        | EMC class                                 | Class B  |   |  |
| Safety                 | Certification standard                    | BS EN IEC 61851-1:2019, IEC62<br>BS EN IEC 61000-6-1:2019, BS<br>BS7671:2018-amd2:2022 77<br>V2.2.2:2019, EN 300 330<br>V2.2.3:2019, EN 301 489-3 V<br>V3.2.0:<br>EN 62311:2020, BS7671:2018 | S EN IEC 61000-6-3:2007+A1,<br>22.411.4.1(iv), EN 300 328<br>/2.1.1:2017, EN 301 489-1<br>/2.1.1:2019, EN 301 489-17<br>2017, |  |
|                        | Certification                             | CE, RoHS, Reach  |   |  |
|                        | Warranty                                  | Three years  |   |  |
|                        | Type of protection against electric shock | Class I eq   | uipment   |  |

# Installation Guide



## Installation

- Before the installation, ensure that:
  - All applicable local, regional, and national regulations must be applied when installing, repairing, and maintaining this device.
  - An approved Type A RCBO with earth leakage protection of 30mA and 40A current rating must be installed separately in the consumer unit by the installer.

#### 4.1 Prepare tools

| TOOL                    | ICON | FUNCTION                           | TOOL                    | ICON   | FUNCTION                  |
|-------------------------|------|------------------------------------|-------------------------|--------|---------------------------|
| Tape ruler              |      | Measure the installation height    | Marker                  |        | Make marks on the wall    |
| Electric<br>screwdriver |      | Fasten the screws                  | Wire<br>stripper        | J. L.  | Stripe the cable and wire |
| Hammer                  |      | Drive the wall plugs into the wall | Electric<br>drill       | Party. | Drill holes on the wall   |
| Wire<br>stripper        | 02   | Stripe the wire                    | Adjustable spanner      |        | Fasten the gland          |
| Wire<br>stripper        |      | Check the voltage and current      | Crystal crimping pliers |        | Clamp the RJ45 connector  |
| Level                   |      | Keep the charger level             | Hydraulic clamp         |        | Clamp cord end terminal   |

#### 4.2 Ethernet connection cable

| CABLE TYPE         | SPECIFICATION                       |
|--------------------|-------------------------------------|
| RJ45 network cable | Cat 5e or higher, CSA: 0.2 ~0.25mm2 |



RJ45 network cable is required only when the charger is connected to a wired network.

#### 4.3 Prepare RCBO

| INPUT                        | SPECIFICATION   |
|------------------------------|---|
| Single-phase/<br>Three-phase | 2P/4P RCBO, Type A, C40, in compliance with local regulations |

#### 4.4 Prepare AC input cable

| CABLE TYPE                                     | OPERATING CURRENT | CROSS-SECTIONAL AREA |
|--|-------------------|----------------------|
| AC input power cable (three-phase five-wire)   | 32A               | 6mm2                 |
| AC input power cable (single-phase three-wire) | 32A               | 6mm2                 |



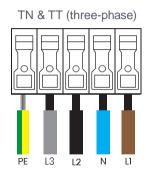
To facilitate cabling, aluminum wires and solid copper wires are not recommended.

The following cables comply with the IEC 60446 standard. Cable colors may vary according to different regions.

Connect power cables based on the actual phase condition.

TN and TT systems are configured with neutral conductors.

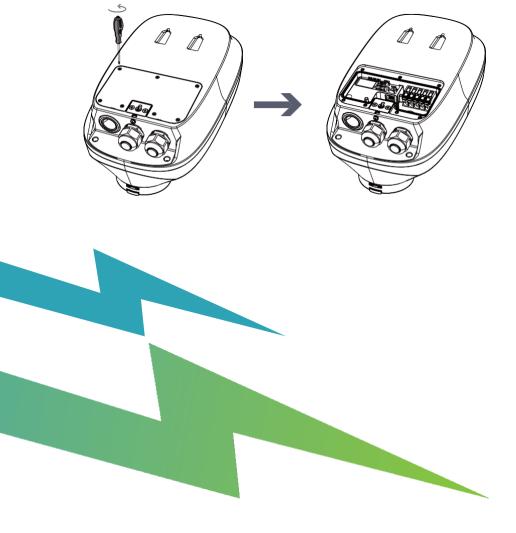
TN & TT (single-phase)



# Wiring

- If the charger is used with a stand or MID meter, please contact us for guidance.
- This instruction refers to mounting 22kW or 7kW without MID meter, mounted to the wall ONLY.

#### 1. Remove the back plate



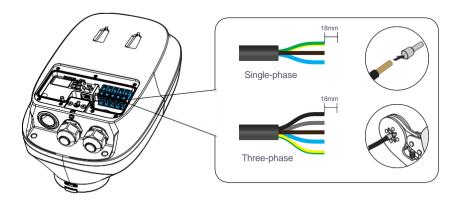
#### 2. Connect AC input cable



Before wiring, please cut off the power supply.

This charger has been designed to be wired with 18mm ferrules only.

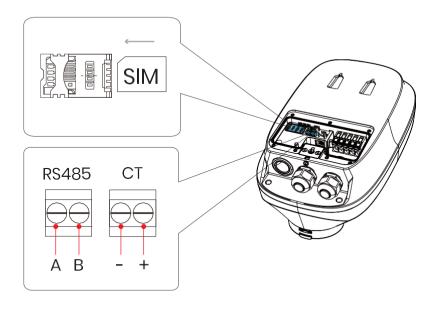
Please ensure ferrules supplied are used.



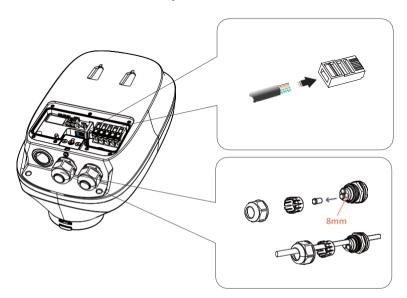
- 3. Insert cable through factory fitted 25mm cable gland.
- 4. Use 6mm<sup>2</sup> 5 core SWA cable for three phase power supply.

#### 5. Insert SIM card & connect RS485 & CT cables

Note: SIM card should be pre-installed

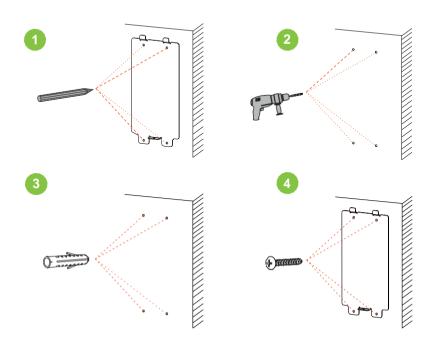


#### 6. Connect Ethernet cable if required

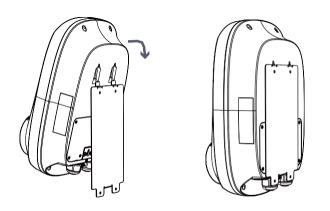


# **Mounting Plate Installation**

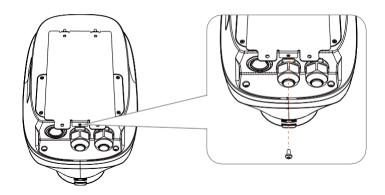
#### 1. Install the mounting bracket



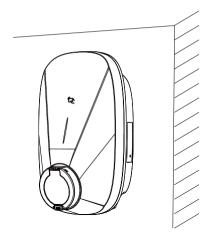
#### 2. Hang the charger on the mounting bracket



#### 3. Fasten the screw to secure the charger



#### 4. Installation completed



# Charger Configuration

(Installer)



# Installation Tests and Configurations

#### FOR 22KW CHARGERS ONLY, REFER TO 6.4 PAGE 30 FOR 7KW CHARGERS

#### 5.1 Charger Access Point (AP) page configuration

This configuration applies for a single charger with residential load.

This balances energy use and adjusts the charging output to your electric vehicle in response to changes in electricity load.

#### Step 1: Airplane mode

Please switch your smartphone to airplane mode



#### Step 2: Power reboot

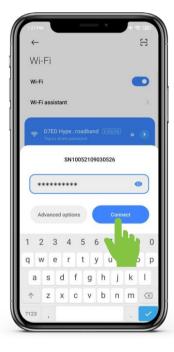
- Restart the power of the charger and ensure the indicator light stops flashing and shows a constant yellow light.
- Please note that network configuration setting is only accessible 15 minutes after the power reboot.



#### Step 3: Charger Wi-Fi

- Turn on your smartphone Wi-Fi.
- Select the Wi-Fi hotspot that contains your charger's serial number (beginning with SN100...).



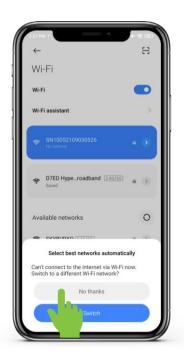


#### Step 4: Input charger Wi-Fi password

- Input the Wi-Fi password from the charger sticker as the password.
- · Select 'Connect'.

#### Step 5: Automatic network switch

Select "No Thanks" when the pop-up Wi-Fi network message appears. The smartphone can communicate with the charger without internet connection.





#### Step 6: Login credentials

- Enter the numbers 192.168.4.1 into your web browser.
- Input the four digit network pin from the side of the charger.
- · Select 'Login'.

#### 5.2 RCD test setup (recommended step)

Testing the RCD can ensure that it is working properly and will provide shock protection in case of an electric fault.

This test should only be carried out by a qualified technician.

#### Step 1: Charger AP page login

- Refer to 5.1 (Steps 1-6).
- · Select 'Charger Setup'.





**Step 2: Selecting the charging modes**Select 'Switch Charging Modes'.

#### Step 3: Plug & Play mode option

This mode enables the user to charge the vehicle without any authorisation.

Charging starts as soon as the charger is plugged into the vehicle.

- Select 'Plug & Play' mode.
- · Confirm.
- The charger will reboot after switching modes.

Plug & Play mode should be used for RCD testing and should only be carried out by a qualified technician.





After completing all the test steps (Steps 1-3), please change it to 'Network' mode.

#### Step 4: Test setup

- Connect the EVSE adapter to the charger.
- Connect the installation tester 3-pin plug into the EVSE adapter.
- An installation tester can be used to test the RCD of the charger by changing the load
- Change the CP state of the EVSE adapter from 'A' to 'C' to start charging.
- Test the RCD is working with the installation tester by changing the load.



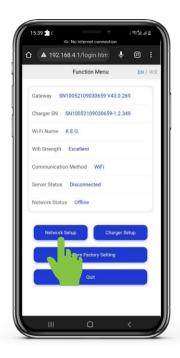
# 6 Charger Configuration

#### **6.1 Network Configuration**

#### Step 1: Charger AP page login

Refer to 5.1 (Steps 1-6)





Step 2: Open Network setup

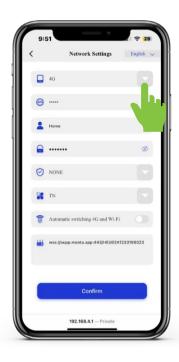
Select 'Network Setup' menu to configure the charger mode.

# Step 3: Select preferred network mode - Wi-Fi or 4G

#### a Wi-Fi

- Select the correct Wi-Fi network from the second drop-down menu.
- Input the Wi-Fi password.
- Select 'Confirm'
- A confirmation success message appears and the charger restarts.





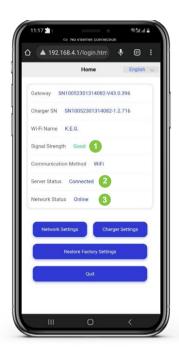
#### b. 4G

- Select "4G" on the network mode dropdown menu.
- · Input the SIM APN.
- · Input username and password if required
- Toggle ON 'Automatic switching 4G and Wi-Fi' if required.
- · Select 'Confirm'.

#### Step 4: Verifying network connectivity

#### a Wi-Fi

- Verify that the Wi-Fi strength is either 'Good 'or 'Excellent'.
- If the Wi-Fi strength is "Poor", an alternative Wi-Fi network or Wi-Fi extender will need to be used.
- · Verify that the Server Status is 'Connected'.
- · Verify that the Network Status is 'Online'.





#### b. 4G version

- · Verify that the Server Status is 'Connected'.
- · Verify that the 'Network Status' is 'Online'.

### OPTIONAL - NORMALLY APPLICABLE TO HIGHER LOAD AND RESIDENTIAL

#### **INSTALLATIONS**

#### 6.2 Load balance configuration

This configuration allows the charger to limit the charging output to your electric vehicle in response to changes in electricity load.

#### Step 1: Charger settings

- Login to the charger Wi-Fi with the unique password from the side of the charger.
- · Select 'Charger Setup'.
- · Select 'Basic settings'
- · Select 'Load balance'

#### Step 2a: Load balance current transformer (CT)

Select "No" if no CT fitted by installer





#### Step 2b: Load balance current transformer (CT) if fitted

- Select 'Yes' on the Load Balance Current Transformer option.
- · Select 'Next'.

#### Step 3: Enabling/Disabling load balance

- Toggle ON the 'Enable Load Balance' for activation of dynamic load balancing for the home/site.
- Input the maximum consumer load current capacity.
- Select 'Confirm'





# 6.3 Maximum charging current setting (optional)

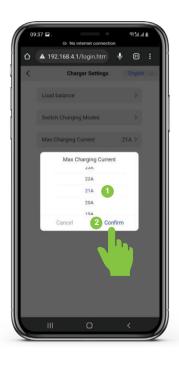
This allows selection of the maximum current available to charge the vehicle, depending on the house load requirement and fuse rating.

#### Step 1: Input the max charging current details

- After logging into the charger AP page select 'Charger setup'.
- Select 'Basic settings'
- Select 'Max Charging Current'.

#### Step 2: Select the max charging current

- Scroll up/down to select the required current.
- Select 'Confirm'
- After 5 seconds reboot the charger manually.





# 6.4 Instructions to toggle from 22kW to 7kW (optional)

- Refer to 5.1 (Steps 1-6 Page 19)
- · Select Network Setup
- Select IT system
- Select Three phase charging toggle OFF
- Select 'Confirm'. The charger will reboot.
- Connect to the charger again by following steps 5.1 (Step 1-6)
- · Select Network settings
- · Select TN system
- · Select 'Confirm'

The charger will reboot after the configuration and is set to 7kw.

# Monta setup and User guide



# Monta Set-up and User guide

The Monta App needs to be installed by both the installer and the end user so the installer can transfer the integrated charger to the end user account after all the tests are completed.

#### Step 1: Downloading the Monta app

Scan the QR code to the right and follow the link or search for 'Monta EV Charging' on AppStore or Google Play.







#### Step 2: Scan The QR on your charger

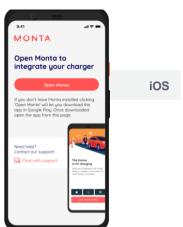
After downloading the app, scan the Monta QR code on the side of your EN+ charger using your QR scanner or Google Play.

#### Step 3: Open the Monta app

Follow the link to open the app.



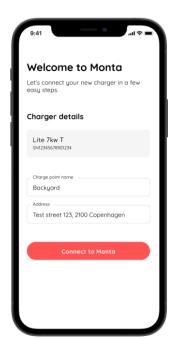




#### Step 4: Create your Monta account

Create your account using your phone number or social logins (Apple/Google/Microsoft).



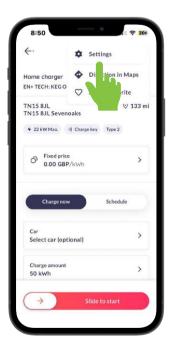


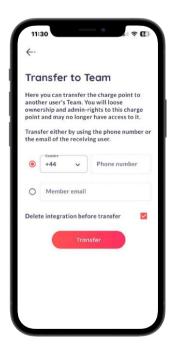
Step 5: Add charger details

Follow the last few steps on the Monta app to complete the Integration with Monta.

#### Step 6: Transfer the charger to the end user Monta account

- · Open charger 'Settings'
- · Select 'Transfer Charger'
- Provide the end user details and select 'Transfer'.





## **About PEN Protection**

- The charge is equipped with PEN Fault Protection and an automatic disconnection system which satisfies the requirements of BS7671:2018 Amendment 2:2022 722.411.4.1 (iv) the 18th Edition IET Wiring Regulations.
- If the voltage remains consistently below 207 Volts or above 253 Volts for 5 seconds, this may indicate a PEN fault. If such a situation arises, this device ensures safety by disconnecting the vehicle from both the live conductors of the supply and the protective earth to prevent electric shock.
- This implies that the charge point can be installed without the need for an additional earth rod. However, if the customer or local regulations require that an earth rod is installed (for instance as part of an earthed system), then this should be connected to the dedicated terminal within the charger.

# **UK EV Smart Charge Point** Regulation

The UK government has introduced new rules and regulations around EV charging to ensure that consumers are protected and to tackle the rising electricity demand in the country.

The rules apply to the electric vehicle private charger which are sold for use in a domestic or workplace environment in Great Britain.

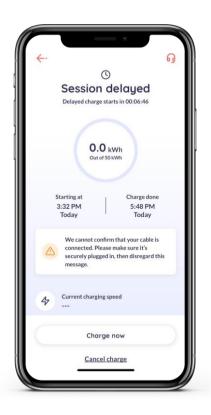
These measures were designed to help manage increasing electricity demand from the UK's transition to electric vehicles (EVs) and improve security protocols. The regulation details are as follows:

- Phase 1 of the UK government's Electric Vehicle (Smart Charge Points) Regulations 2021 came into force on 30 June 2022 and includes -
  - Randomised delay
  - Loss of communications network access
  - Default Charge settings
- On December 2022, Phase 2 of UK regulations came into effect now including builtin cyber security features -
  - Tamper boundary protection
  - Event logs for user privacy and data protection

### Phase 1

# 9.1 Randomised delay

- The regulations have made it mandatory to add the feature of 'Randomised delay' to protect the stability of the national electricity system from high volumes of chargers switching on or off at the exact same time.
- Under this regulation, the start or stop of a charger will be subjected to a random delay of up to 600 seconds. The user may experience that the charging session will not start at the exact scheduled time and should take this into account when checking the charging status.
- The user can override this delay in the Monta app by selecting the "Switch to Charge now" right after the swipe to charge on each charging instances.



### 9.2 Loss of communications network access

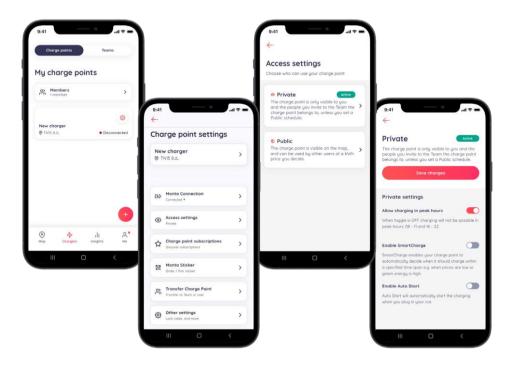
- Under the UK regulations, the charger should be configured to charge the vehicle even if it loses connection to the communication network. In that situation, the charger is offline.
- To improve the experience for users, the charger should support local authorization
  of identifiers.
- The registered RFID cards can be used to charge the vehicle even if the charger is offline. (Refer 5.2.2)

# 9.3 Default charge schedule

- With the introduction of smart charge point regulations, the UK government imposed an off-peak charging feature to manage the electricity demand during peak hours
- Off-peak charging only allows the user to charge the vehicle during off-peak hours.
   The chargers will not be able to operate from 8am to 11am and 4pm to 10pm which are considered as the peak hours during weekdays.
- There is no peak hour during weekends.

To disable this feature and charge your vehicle at your convenience:

- Open the Monta app.
- Under the section 'Chargers', select on the settings icon on the charger.
- · Select 'Access settings' and select "Private".
- Toggle on 'Allow charging in peak hours'.
- · Select 'Save changes'.



### Phase 2

# 9.4 Cyber security

On December 30th, 2022, Phase 2 of the UK Smart Charge Points Regulations—which includes several reinforced security measures to make owning and using an EV charger as secure as possible—went into effect.

The features that are important for the user to know are as follows:

- A "tamper-protection boundary" is included to secure the charger's internal components. The charger will quickly log any unauthorised attempts to access it internally and notify the registered owner.
- The user's personal information can be deleted from the Monta app by calling Monta customer support.
- The charger firmware updates will be provided for 3 years from the date of purchase.

The following measures are recommended for charger security:

- · Remove the charger network pin sticker from the charger and keep it safe.
- The charger Access Point page is only open for 15 minutes, after which the page is inaccessible as a security precaution.
- Contact the Monta support immediately if the charger sends critical security event notification in the app.
- If the user receives notification from the app to upgrade, ensure upgrade is installed
- · The RFID cards should be kept secure.
- · Ensure the Monta account has a strong password.

# Light Indicators and Troubleshooting

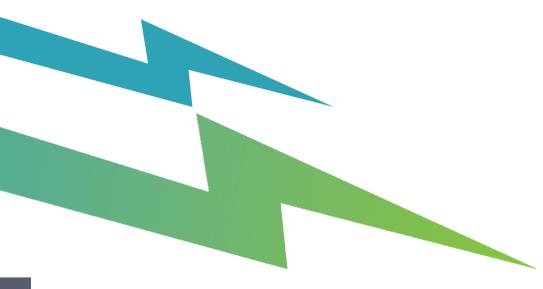


# 10 Light Indicators

| COLOUR              | INDICATOR STATUS   | CHARGER STATUS   |
|---------------------|--|--|
| Green               | Cycle: flash slowly (on for 1s then off for 3s)  | Charger standby  |
|                     | Cycle: flash green twice (on for 200ms and off for 1000ms), then off for 3000ms  | Charger started successfully, and wait for EV's feedback                             |
|                     | AC output current is too high<br>Cycle: flash green five times (on for 200ms<br>and off for 1000ms), then off for 3000ms | Charging connector plugged   |
|                     | Fades in and out at intervals of 1s  | Charging in progress   |
|                     | Cycle: flash green (on for 1s and off for 3s)  | Charging ended   |
| Yellow              | Steady yellow  | Warnings   |
|                     | Cycle: flash yellow (on for 2000ms and off for 2000ms)   | Charging connector has been reserved (occupied) Scheduled charging in Bluetooth mode |
|                     | Cycle: flash yellow five times (on for 200ms and off for 1000ms), then off for 3000ms.                                   | Insufficient power allocated, charging suspended                                     |
|                     | Cycle: flash yellow for up to five times (on for 100ms and off for 100ms)  | Successfully card swiping  |
|                     | Cycle: flash green for 1s then flashing yellow for 1s, and then off for 3s   | No network/Not connected to the server   |
|                     | Cycle: flash quickly, on 200ms and off 1000ms for five times, then off 3s  | Standby status is suspended when insufficient power is allocated                     |
|                     | Bluetooth lock   | Flashing slowly (on for 4s and off for 1s)   |
| Red<br>Red & yellow | Flashing red/Steady red<br>Flashing red and yellow   | Faulty   |
| White               | Cycle: flashing white (on for 1000ms and off for 1000ms)   | Self-test upon power on  |
|                     | Cycle: flashing white (on for 200ms and off for 1000ms), then off for 5000ms.  | Firmware upgrading   |

# 11 Troubleshooting

| COLOUR             | FAULT  | INDICATOR STATUS   |
|--------------------|--|--|
| Red                | Relay adhesion   | Steady red   |
|                    | Leakage current  | Cycle: flash red once then off for 3s  |
|                    | CP fault   | Cycle: flash red twice then off for 3s                                       |
|                    | Over current   | Cycle: flash red three times then off for 3s                                 |
|                    | Input wires are connected reversely                            | Cycle: flash red four times then off for 3s                                  |
|                    | Leakage current loop is abnormal                               | Cycle: flash red five times then off for 3s                                  |
|                    | Input terminals over temperature                               | Cycle: flash red six times then off for 3s                                   |
|                    | Relay over temperature   | Cycle: flash red seven times then off for 3s                                 |
| Red<br>+<br>Yellow | Over/under voltage   | Cycle: stay yellow for 2s then flash red once then off for 3s                |
|                    | Over/under frequency   | Cycle: stay yellow for 2s then flash red twice then off for 3s               |
|                    | Meter communication is abnormal                                | Cycle: stay yellow for 2s then flash red three times then off for 3s         |
|                    | Smart Meter communication is abnormal                          | Cycle: stay yellow for 2s then flash red four times then off for 3s          |
|                    | Charging connector lock abnormal                               | Cycle: stay yellow for 2s then flash red six times then off for 3s           |
|                    | Charging connector current abnormal                            | Cycle: stay yellow for 2s then flash red seven times then off for 3s         |
| White              | BOOT security verification failed or the security chip failure | Cycle: flash twice (on for 200ms and off for 1000ms for) then off for 5000ms |



# **Maintenance**

| NO. | ITEM                      | OPERATING PROCESS  |
|-----|---------------------------|--|
| 1   | Charger components        | Use a dry non-static cloth to clean the charger surface.  If there is any damage on the vehicle connector, charging cable, or vehicle connector holder, please contact customer service immediately.                     |
| 2   | Charger casing            | Do not hit or press hard on the case. If the case is damaged, please contact customer service.   |
| 3   | Moisture and water notice | If you notice any water or moisture inside the charger, it is important to immediately turn off the electricity supply to prevent any potential danger. Before using the station again, contact a qualified electrician. |
| 4   | Flammable substance       | It is important to ensure that the charger is kept away from hazardous materials, such as flammable gases and corrosive substances.  |

# Security Events and Customer Support

# 12.1 Security events

| NOTIFICATION               | FUNCTION   |
|----------------------------|--|
| Firmware updated           | The Charger firmware is updated                        |
| Startup of the device      | The Charger has booted                                 |
| Reset or reboot            | The Charger was rebooted or reset                      |
| Security log was cleared   | The security log was cleared                           |
| Memory exhaustion          | The Flash or RAM memory of the Charger is getting full |
| Tamper detection activated | The physical tamper detection sensor was triggered     |

# 12.2 Monta support

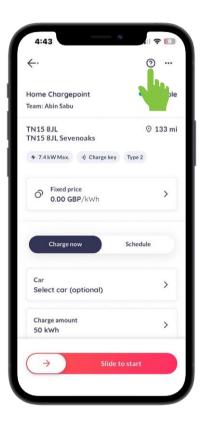
Visit https://monta.com/uk/support/ to learn how to use Monta, fix a problem, and get answers to your questions.

Visit https://monta.com/uk/help-center/ for further information

Chat with or call support is available in the Monta app under "My Profile" for queries and any difficulties working with the app.

To contact Monta support:

- Open Monta app
- · Select the charger
- · Select the icon in the image









Smart Charge Points Regulations COMPLIANT

evtec-automotive.com